

EXHIBIT J

In the Matter Of:

UNITED STATES vs

GOOGLE

BRIAN O'KELLEY

September 29, 2023



IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
ALEXANDRIA DIVISION

- - -

UNITED STATES OF	:	CASE NO.
AMERICA, et al.,	:	1:23-cv-00108
	:	-LMB-JFA
Plaintiffs,	:	
	:	
v.	:	
	:	
GOOGLE, LLC,	:	
	:	
Defendant.	:	

- HIGHLY CONFIDENTIAL -

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September 29, 2023

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Videotaped deposition of
BRIAN O'KELLEY, taken pursuant to notice,
was held at the law offices of Goodwin
Procter LLP, The New York Times Building,
620 Eighth Avenue, New York, New York,
beginning at 9:03 a.m., on the above
date, before Michelle L. Gray, a
Registered Professional Reporter,
Certified Court Reporter, Certified
Realtime Reporter, and Notary Public.

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APPEARANCES:

US DEPARTMENT OF JUSTICE

ANTITRUST DIVISION

BY: JULIA TARVER WOOD, ESQ.

(In person)

BY: AMANDA STRICK, ESQ.

(In person)

450 Fifth Street, NW

Suite 8700

Washington, D.C. 20530

202.307.0924

julia.wood@usdoj.gov

amanda.strick@usdoj.gov

Representing the United States of

America

AXINN, VELTROP & HARKRIDER LLP

BY: BRADLEY JUSTUS, ESQ.

(In person)

1901 L Street NW

Washington, D.C. 20036

202.912.4700

bjustus@axinn.com

- and -

AXINN, VELTROP & HARKRIDER LLP

BY: BLAKE E. PESCATORE, ESQ.

(In person)

BY: CHRISTOPHER ERICKSON, ESQ.

(Zoom)

114 West 47th Street

New York, New York 10036

212.728.2200

bpescatore@axinn.com

cerickson@axinn.com

Representing The Defendant, Google

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APPEARANCES: (Cont'd.)

PAUL, WEISS, RIFKIND, WHARTON &

GARRISON LLP

BY: ERICA SPEVACK, ESQ.

(Zoom)

BY: WILLIAM A. ISACCON, ESQ.

(Zoom)

BY: JEANNIE S. RHEE, ESQ.

(Zoom)

2001 K Street, NW

Washington, D.C. 20006

202.223.7300

espevack@paulweiss.com

wisaacson@paulweiss.com

jrhee@paulweiss.com

Representing the Defendant, Google

GOODWIN PROCTER, LLC

BY: JORDAN D. WEISS, ESQ.

(In person)

The New York Times Building

620 Eighth Avenue

New York, New York 10018

212.813.8800

jweiss@goodwinlaw.com

Representing the Witness

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APPEARANCES: (Cont'd.)

ALSO PRESENT:

VIDEOTAPE TECHNICIAN:

Lem Lattimer - in person

(Lexitas)

ZOOM MONITOR:

Nathaniel Avila - zoom

(Lexitas)

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By Mr. Justus 193

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E X H I B I T S

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NO.	DESCRIPTION	PAGE
O'Kelley Exhibit 1	Amended and Restated Display Media Services Agreement MSFT-0001492336-98	199
O'Kelley Exhibit 2	E-mail Thread 8/7/11 Subject, Google-AdMeld DOJ Investigation DOJ-ADS-0000077953	211
O'Kelley Exhibit 3	E-mail Thread, 5/4/20 Subject, Highly Confidential OKELLEY000346-49	217

<p style="text-align: right;">Page 38</p> <p>1 And so if you think about</p> <p>2 that, if you're a website publisher and</p> <p>3 you only have, you know, so many people</p> <p>4 coming to your site and so many ads you</p> <p>5 can sell, how do you price and how do you</p> <p>6 manage the yield on your inventory to get</p> <p>7 the most -- the most revenue and profit.</p> <p>8 Q. And at some point, you said</p> <p>9 in 2007, you left Right Media?</p> <p>10 A. Yep. We sold Right Media to</p> <p>11 Yahoo in July of '07, and I was fired</p> <p>12 right before the deal closed.</p> <p>13 Q. Terminated for cause?</p> <p>14 A. Nope.</p> <p>15 Q. Okay. And what did you do</p> <p>16 next?</p> <p>17 A. I very quickly realized that</p> <p>18 the evolution of the programmatic space --</p> <p>19 just to sort of explain the hypothesis.</p> <p>20 Right Media was a closed platform in the</p> <p>21 sense that to bid into an auction, you</p> <p>22 had to use the Right Media ad server.</p> <p>23 There was no idea of a third-party</p> <p>24 technology that could participate in an</p>	<p style="text-align: right;">Page 39</p> <p>1 auction.</p> <p>2 And so I had this idea that</p> <p>3 we should let other technology platforms</p> <p>4 bid so that -- you know, I'm trying not</p> <p>5 to make this too technically complicated.</p> <p>6 But an auction would happen</p> <p>7 not just in one server, but we could fire</p> <p>8 that request off to other bidders. You</p> <p>9 could build your own technology platform,</p> <p>10 and it could use whatever algorithm you</p> <p>11 wanted and make a decision about how to</p> <p>12 bid on the ad. So instead of just all</p> <p>13 being our algorithm, we'd have all these</p> <p>14 different companies building technology</p> <p>15 to place bids.</p> <p>16 And that wasn't possible</p> <p>17 with Right Media. And it wasn't possible</p> <p>18 with -- there's only a couple other sort</p> <p>19 of very small ad exchanges at that point.</p> <p>20 And I had a noncompete with</p> <p>21 Right Media as part of my severance. So</p> <p>22 instead of building the actual ad tech</p> <p>23 platform, I realized that we were going</p> <p>24 to have to have cloud computing to enable</p>
<p style="text-align: right;">Page 40</p> <p>1 the kind of scale and performance to do</p> <p>2 this.</p> <p>3 So instead of building the</p> <p>4 ad tech pieces, I built the cloud</p> <p>5 computing layer that would facilitate</p> <p>6 realtime bidding. It's almost like</p> <p>7 the -- you know, the enabling technology</p> <p>8 that the industry would need. And that</p> <p>9 company was called AppNexus. And we</p> <p>10 founded it in, I think, September of</p> <p>11 2007.</p> <p>12 Q. You referred to the scale</p> <p>13 that would be needed to facilitate</p> <p>14 realtime bidding. Tell us what you mean</p> <p>15 by scale.</p> <p>16 A. Well, if you think about --</p> <p>17 I mean, Right Media alone, just to run --</p> <p>18 I'm just thinking of the numbers. Like,</p> <p>19 we probably did 150 billion impressions a</p> <p>20 month, and we had to have three or four</p> <p>21 data centers around the world. You know,</p> <p>22 hundreds or thousands of servers to</p> <p>23 actually handle all those requests.</p> <p>24 But if you were going to</p>	<p style="text-align: right;">Page 41</p> <p>1 federate all those bid requests,</p> <p>2 meaning -- if anyone who wanted to bid</p> <p>3 would have to have the same scale. So</p> <p>4 instead of just having one set of those</p> <p>5 servers, any company that was trying to</p> <p>6 participate in these auctions would have</p> <p>7 to handle the same volume. So instead of</p> <p>8 150 billion, it's 150 billion for each</p> <p>9 participant.</p> <p>10 And that meant you'd have to</p> <p>11 have the same -- basically, the same</p> <p>12 number of servers, the same ability to</p> <p>13 operate extremely fast, because this all</p> <p>14 has to happen in a fraction of a second.</p> <p>15 Just, you know, a huge explosion of</p> <p>16 hardware and networking capacity. And I</p> <p>17 just knew how hard it was to build that</p> <p>18 at Right Media.</p> <p>19 I had a whole team whose</p> <p>20 only job was, you know, getting on the</p> <p>21 phone with HP or Dell and trying to get</p> <p>22 them to ship servers fast enough and wire</p> <p>23 them up. It was a really hard job.</p> <p>24 And so this was right when</p>

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<p>1 Our ad tech business, we</p> <p>2 went through a few different</p> <p>3 business models, I would say, but</p> <p>4 we tended to charge on a rev share</p> <p>5 basis, so a percentage of revenue</p> <p>6 for each participant.</p> <p>7 BY MS. WOOD:</p> <p>8 Q. And do you remember, in the</p> <p>9 2007 to 2010 time frame, what was the</p> <p>10 approximate rev share for the ad tech</p> <p>11 business for AppNexus?</p> <p>12 MR. JUSTUS: Objection to</p> <p>13 form.</p> <p>14 THE WITNESS: So our very</p> <p>15 first -- so we invented this thing</p> <p>16 called header bidding, which</p> <p>17 basically -- actually, it's more</p> <p>18 or less the same thing as the</p> <p>19 original SSP we launched at Right</p> <p>20 Media, like yield manager, which</p> <p>21 let us auction ads on publisher</p> <p>22 websites before they went to the</p> <p>23 ad server.</p> <p>24 So the biggest challenge for</p>	<p>1 everybody was that, you know,</p> <p>2 DoubleClick, and then Google,</p> <p>3 controlled the main ad server for</p> <p>4 the industry.</p> <p>5 And so holding auctions was</p> <p>6 very difficult when you couldn't</p> <p>7 do it in the ad server. So,</p> <p>8 typically, we'd done it after the</p> <p>9 ad server made decisions.</p> <p>10 This new idea of holding an</p> <p>11 auction before the ad server saw</p> <p>12 it was called header bidding. And</p> <p>13 we charged 5 percent of revenue</p> <p>14 for our header bidding solution</p> <p>15 back then.</p> <p>16 And then in -- and we</p> <p>17 launched that in '08.</p> <p>18 We actually built an open</p> <p>19 source bidder that would bid on</p> <p>20 those auctions, and we gave it</p> <p>21 away for free in the beginning.</p> <p>22 eBay was our first customer. And</p> <p>23 we quickly realized that it was</p> <p>24 very difficult to ask a company,</p>
Page 68	Page 69
<p>1 even a very sophisticated company</p> <p>2 like eBay, to build tech that</p> <p>3 would handle all the complexity</p> <p>4 and nuances of bidding into</p> <p>5 auctions. And so we built our own</p> <p>6 bidder, or DSP, if you will.</p> <p>7 And I want to say we charged</p> <p>8 5 to 10 percent for that bidder</p> <p>9 when we launched it in '09.</p> <p>10 BY MS. WOOD:</p> <p>11 Q. And so what -- just to</p> <p>12 summarize, from 2007 to 2010, what</p> <p>13 different ad tech products did AppNexus</p> <p>14 have?</p> <p>15 MR. JUSTUS: Objection.</p> <p>16 Form.</p> <p>17 THE WITNESS: We had a</p> <p>18 number of products, but the</p> <p>19 primary products were this header</p> <p>20 bidding solution, which mainly sat</p> <p>21 on the shelf during that time</p> <p>22 frame. We had a few people using</p> <p>23 it. We had a hard time getting</p> <p>24 traction.</p>	<p>1 We built a -- what people</p> <p>2 call a supply-side platform, or</p> <p>3 SSP, which would be, typically,</p> <p>4 sitting in that remnant slot after</p> <p>5 the ad server saw ads and would</p> <p>6 hold auctions.</p> <p>7 And then we had our DSP,</p> <p>8 which would bid on ads on behalf</p> <p>9 of advertisers and agencies.</p> <p>10 BY MS. WOOD:</p> <p>11 Q. You mentioned a couple of</p> <p>12 times that DoubleClick's publisher ad</p> <p>13 server was used by many, if not most,</p> <p>14 publishers.</p> <p>15 Do you have any sense of the</p> <p>16 market size of DoubleClick's publisher ad</p> <p>17 server prior to DoubleClick being</p> <p>18 acquired by Google?</p> <p>19 MR. JUSTUS: Objection to</p> <p>20 form. Misstates prior testimony.</p> <p>21 THE WITNESS: I don't have a</p> <p>22 precise market share number. I</p> <p>23 can say that, at that time, the</p> <p>24 portals, meaning Microsoft, Yahoo,</p>

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1 and AOL, did not use DoubleClick.
2 And The New York Times did
3 not use DoubleClick. They had a
4 homegrown ad server. But almost
5 every other major publisher in the
6 U.S., every major news publisher,
7 every major e-commerce publisher,
8 used DoubleClick. So their share
9 of the nonportal market was vast.
10 BY MS. WOOD:
11 Q. What do you mean by the
12 portal market?
13 A. I mean there was three -- we
14 called them portals back in that day,
15 because -- there was a time where all
16 those companies ran dial-up ISPs, which,
17 you know, is no longer a thing.
18 But the first page your
19 browser would load would be the ISP's
20 website, and it was sort of your portal
21 into the internet. That was kind of how
22 Yahoo was started. This is your homepage
23 for the internet. So we called them
24 portals.

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1 market, except for the -- you know, I
2 can't remember if it was even really a
3 shift -- but they had been working on
4 some kind of small business ad server.
5 But I don't recall getting much traction.
6 Q. And then there came a time
7 that Google acquired DoubleClick?
8 MR. JUSTUS: Objection to
9 form.
10 THE WITNESS: Google did
11 acquire DoubleClick.
12 BY MS. WOOD:
13 Q. And how, if at all, did
14 Google's acquisition of DoubleClick
15 impact competition in the ad tech
16 industry?
17 MR. WEISS: Objection.
18 MR. JUSTUS: Objection to
19 form.
20 THE WITNESS: I think that
21 DoubleClick on its own had a
22 significant -- huge amount of
23 market leverage. They were, you
24 know, not just the publisher, ad

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1 But at that time those were
2 all -- those were three of the largest
3 internet companies in the world and had a
4 significant share.
5 So, you know, they were
6 not -- I mean, AOL used DoubleClick for a
7 bit, but not really. I think by that
8 time, during that phase, they were on
9 their own homegrown technology.
10 Q. And during the time period
11 from 2007, when you founded AppNexus,
12 what ad tech products did Google have,
13 again, pre DoubleClick merger?
14 MR. JUSTUS: Objection.
15 Form.
16 THE WITNESS: My
17 recollection is that -- you're
18 saying pre merger?
19 BY MS. WOOD:
20 Q. Pre merger.
21 A. Pre merger, I know they had
22 the AdSense ad network. That was their
23 primary product. I don't recall them
24 having a whole lot of ad tech on the

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1 server for most publishers. They
2 were also the advertisers' ad
3 server for most agencies and
4 advertisers.
5 What Google did when they
6 acquired it was they layered in
7 the AdSense revenue.
8 So Google AdSense was, if
9 not the largest, one of the very
10 largest ad networks in the world.
11 And if you think about the
12 way these programmatic auctions
13 work, the more demand, the higher
14 the price for the publisher. And,
15 you know, moving the world's
16 largest, or one of the largest, ad
17 networks in and out of an auction
18 would have a massive impact on
19 revenue.
20 And so Google deciding to
21 only let AdSense participate in
22 the DoubleClick auction meant that
23 DoubleClick could out-monetize
24 others.

<p style="text-align: right;">Page 74</p> <p>1 And, secondly, DoubleClick</p> <p>2 controlling the ad server meant</p> <p>3 that it could auction guaranteed</p> <p>4 campaigns, the campaigns that the</p> <p>5 publisher sold itself, against all</p> <p>6 of the programatic demand.</p> <p>7 So instead of being remnant,</p> <p>8 it could do a more dynamic yield</p> <p>9 management process. And so they</p> <p>10 had two just fundamental</p> <p>11 advantages, by controlling the ad</p> <p>12 server and by having this massive</p> <p>13 source of unique demand, that made</p> <p>14 it extremely difficult for anyone</p> <p>15 else to compete with.</p> <p>16 BY MS. WOOD:</p> <p>17 Q. Did Google's acquisition of</p> <p>18 DoubleClick increase the dominance of the</p> <p>19 DFP ad server?</p> <p>20 MR. JUSTUS: Objection.</p> <p>21 Form.</p> <p>22 THE WITNESS: My perspective</p> <p>23 was -- is that DFP was already</p> <p>24 pretty dominant, and they were</p>	<p style="text-align: right;">Page 75</p> <p>1 able to, for instance, get The New</p> <p>2 York Times to switch to DFP over a</p> <p>3 couple years.</p> <p>4 They certainly made it</p> <p>5 economically almost impossible to</p> <p>6 switch. It wasn't just the best</p> <p>7 technology -- it wasn't the best</p> <p>8 ad server.</p> <p>9 But every other ad server</p> <p>10 company either went out of</p> <p>11 business or was sold for scrap.</p> <p>12 They just destroyed all</p> <p>13 competition for that ad server.</p> <p>14 There's companies like Open</p> <p>15 AdStream, or a company called Ad</p> <p>16 Tech, great name, that AOL bought</p> <p>17 and shut down.</p> <p>18 I mean, really, within a</p> <p>19 couple years of that acquisition,</p> <p>20 there were no viable competitors</p> <p>21 in the publisher ad server space.</p> <p>22 BY MS. WOOD:</p> <p>23 Q. And to this day, are there</p> <p>24 any viable competitors in the publisher</p>
<p style="text-align: right;">Page 76</p> <p>1 ad server space?</p> <p>2 MR. JUSTUS: Objection to</p> <p>3 form.</p> <p>4 BY MS. WOOD:</p> <p>5 Q. For display advertising.</p> <p>6 A. There are --</p> <p>7 MR. JUSTUS: Objection to</p> <p>8 form.</p> <p>9 THE WITNESS: There are two</p> <p>10 other companies that you might</p> <p>11 consider competitors.</p> <p>12 One was AppNexus. I decided</p> <p>13 in about 2014 that somebody had to</p> <p>14 go build an alternative to DFP,</p> <p>15 and I spent hundreds of millions</p> <p>16 of dollars trying. And that was</p> <p>17 not particularly successful,</p> <p>18 commercially. That product is</p> <p>19 still in existence, you know, part</p> <p>20 of Microsoft now.</p> <p>21 And there are a few handfuls</p> <p>22 of large publishers, mainly in</p> <p>23 Europe and I think in Japan, that</p> <p>24 use it, but it never got</p>	<p style="text-align: right;">Page 77</p> <p>1 meaningful traction in the U.S.</p> <p>2 And there is a European</p> <p>3 company called Equativ,</p> <p>4 E-Q-U-A-T-I-V. I don't know how</p> <p>5 to say it. That has a handful of</p> <p>6 customers.</p> <p>7 But there's very little</p> <p>8 competition in that market today.</p> <p>9 BY MS. WOOD:</p> <p>10 Q. And how, if at all, does the</p> <p>11 fact that there's little competition in</p> <p>12 the ad -- publisher ad server market</p> <p>13 impact competition in, for example, the</p> <p>14 ad exchange market?</p> <p>15 MR. JUSTUS: Objection.</p> <p>16 Form.</p> <p>17 THE WITNESS: My perspective</p> <p>18 is that, if you think of this from</p> <p>19 a yield management perspective,</p> <p>20 the basic idea of yield management</p> <p>21 is you want to have all of your</p> <p>22 revenue options, all of your --</p> <p>23 all of your -- all the things</p> <p>24 you're trying to yield manage in</p>

<p style="text-align: right;">Page 94</p> <p>1 limited its advertising customers to bid 2 exclusively into AdX? 3 MR. JUSTUS: Objection to 4 form. 5 THE WITNESS: So going back 6 to the basic idea of how auctions 7 monetize things, it's a very 8 simple supply-and-demand equation. 9 So if there's more demand, then, 10 obviously, prices will go up, and 11 publishers will prefer higher 12 price. 13 Most of the demand sources 14 in the programatic space were 15 shared across all of the SSPs or 16 ad exchanges, meaning that an 17 independent DSP, like MediaMath or 18 the Trade Desk, would bid into 19 every SSP. 20 So having a unique demand 21 source on your exchange had a 22 dramatic impact on the market. 23 It also made it very 24 difficult to switch. So if you</p>	<p style="text-align: right;">Page 95</p> <p>1 think about switching from Rubicon 2 to PubMatic, they may have 3 slightly different technology, 4 they might have slightly different 5 features, different service, but 6 the demand was all the same. And 7 so there's very low switching 8 cost. 9 With Google having a unique 10 demand source, switching away from 11 AdX or switching away from DFP 12 would mean losing one of the 13 largest demand sources, if not the 14 largest demand source, and, 15 therefore, would have significant 16 monetization implications, or cost 17 you a lot of money, or could, if 18 you left. 19 BY MS. WOOD: 20 Q. You referred to Google's 21 demand as unique demand. What did you 22 mean by that? 23 A. I meant that that demand was 24 only available through the Google AdSense</p>
<p style="text-align: right;">Page 96</p> <p>1 platform -- or network, really. 2 And it was unique because it 3 was tied to the Google search business, 4 so most of that demand, if not all of 5 that demand, was coming from search 6 advertisers. So they were using their 7 relationship with Google across different 8 formats to, you know, I think, check a 9 little checkbox that said, "and run this 10 across the internet and display 11 advertising." 12 There was no other -- there 13 were no other way to get those ad 14 dollars, except from Google. 15 Q. In addition to that demand 16 being unique, did it have any other 17 important characteristics, from a 18 competitive point of view? 19 A. One major difference, if you 20 think about search, is that Google could 21 do search retargeting, meaning that they 22 could find people who searched for a term 23 on Google and then follow those people 24 across the internet.</p>	<p style="text-align: right;">Page 97</p> <p>1 So it wasn't just that it 2 was a different platform, it was that 3 they had a unique knowledge of user 4 behavior. 5 And of course they also had 6 YouTube behavior, and they had your 7 e-mail behavior if you used Gmail. They 8 had Chrome as a browser. They had 9 Android as an operating system. 10 There were so many 11 different -- they knew what you searched 12 on on Google Maps or Waze. 13 I mean, there's so many ways 14 that Google knows about its customers, so 15 it was -- it was extremely diverse. 16 If you go back to my 17 hypothesis that diversity of demand or 18 expressiveness of demand is highly 19 valuable in an auction system. So it was 20 extremely different than most other 21 sources of demand that were coming from 22 an ad agency, let's say, that had no 23 direct relationship with the consumer, 24 and, you know, didn't know what the</p>

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<p>1 introduction of header bidding, 2 which was a way to sort of try to 3 hack around that. I'm not sure if 4 that's an appropriate way to say 5 it.</p> <p>6 But, basically, to make -- 7 to give other players the ability 8 to do that without relying on the 9 built-in dynamic allocation 10 functionality.</p> <p>11 BY MS. WOOD: 12 Q. Now, you indicated earlier 13 that you helped create a header bidding 14 system back in what time frame? 15 A. We rolled out header bidding 16 in 2008. 17 Q. Did there come a time later 18 in the history of the ad tech market 19 where header bidding really took off, 20 from a market-wide perspective? 21 MR. JUSTUS: Objection. 22 Form. 23 THE WITNESS: Yeah. Header 24 bidding began to get a lot of</p>	<p>1 traction, I want to say, around 2 2014. It just became increasingly 3 clear that header bidding would 4 drive higher yield for publishers, 5 so publishers began to adopt it.</p> <p>6 BY MS. WOOD: 7 Q. What circumstances occurred 8 between 2008 to 2014 that caused header 9 bidding to take off? 10 MR. JUSTUS: Objection. 11 Form. 12 THE WITNESS: That's a great 13 question. And I think there were 14 a lot of market dynamics. 15 I think the main one was 16 that as the market became more 17 competitive, the idea of getting a 18 first -- getting a fair shot at 19 every impression became 20 increasingly important to all the 21 independent players. 22 And it was very difficult to 23 drive any value behind the Google 24 stack, meaning behind DFP, behind</p>
Page 112	Page 113
<p>1 AdX, just hoping that they 2 dropped -- you know, they didn't 3 actually hit their floor price. 4 With dynamic allocation, 5 they basically would just change 6 the dynamic so they'd always be 7 able to win. And so sitting 8 behind Google meant you wouldn't 9 get any inventory. 10 So we had to -- "we" as the 11 industry -- had to go in front of 12 Google to make it possible. And 13 so I think all major industry 14 participants really jumped into 15 header bidding as the only way to 16 compete with Google in the ad tech 17 space.</p> <p>18 BY MS. WOOD: 19 Q. And why do you say header 20 bidding was the only way for the major 21 participants to compete against Google in 22 the ad tech space? 23 A. Well, if DFP is the, you 24 know, majority ad server for most of the</p>	<p>1 industry, and if the ad server makes the 2 final decision about which ad to serve, 3 you have to find some way to influence 4 that decision.</p> <p>5 And, you know, in the early 6 days, before dynamic allocation, it was 7 what I would consider a daisy chain at 8 the end of the waterfall. So, you know, 9 if the publishers' guaranteed direct-sold 10 ads didn't serve, then it would go to 11 AdX. If AdX didn't meet the floor, it 12 would go to network's AppNexus piece. 13 And, you know, a large piece 14 of inventory would go into that daisy 15 chain.</p> <p>16 But as the market matured 17 and Google got more aggressive on dynamic 18 allocation and other techniques, it 19 became harder and harder to get inventory 20 out the bottom of that waterfall. 21 And so I think everyone 22 realized that, to get a fair shot, we had 23 to go -- that was the chokepoint for all 24 these decisions. We had to influence</p>

<p style="text-align: right;">Page 114</p> <p>1 those decisions, and we had to go before</p> <p>2 because after wasn't working.</p> <p>3 Q. And how did the practices of</p> <p>4 DFP impact the market share of AdX over</p> <p>5 that time period?</p> <p>6 MR. JUSTUS: Objection.</p> <p>7 Form.</p> <p>8 THE WITNESS: AdX was -- I</p> <p>9 mean, market share of AdX</p> <p>10 increased dramatically because of</p> <p>11 the actions of DFP.</p> <p>12 BY MS. WOOD:</p> <p>13 Q. Can you explain.</p> <p>14 MR. JUSTUS: Objection.</p> <p>15 Form.</p> <p>16 Go ahead.</p> <p>17 THE WITNESS: So the ability</p> <p>18 to bid at multiple points in the</p> <p>19 waterfall, if you will, by DFP</p> <p>20 gave AdX the ability to sort of</p> <p>21 dynamically price in a waterfall.</p> <p>22 Basically meaning they could</p> <p>23 always have the right price point</p> <p>24 to clear an impression. They</p>	<p style="text-align: right;">Page 115</p> <p>1 could -- they could preempt</p> <p>2 guaranteed campaigns that others</p> <p>3 couldn't. That is a great selling</p> <p>4 point to buyers, to say, we have</p> <p>5 access to inventory nobody else</p> <p>6 does, we can win bids that no one</p> <p>7 else can win. It's a very</p> <p>8 compelling commercial story for</p> <p>9 them.</p> <p>10 Technically it meant their</p> <p>11 win rate in auctions was higher</p> <p>12 than anyone else's. So just</p> <p>13 multiple reasons that they had an</p> <p>14 advantage.</p> <p>15 It was also built into the</p> <p>16 ad server, meaning that you didn't</p> <p>17 have to have the user's browser</p> <p>18 bounce between different systems.</p> <p>19 So there was no loss between the</p> <p>20 ad server and the ad exchange.</p> <p>21 So, you know, any -- any</p> <p>22 loss, meaning, like, the browser</p> <p>23 drops a connection or something</p> <p>24 like that, is a loss of revenue</p>
<p style="text-align: right;">Page 116</p> <p>1 for the publisher, so it was less</p> <p>2 risky for the publisher.</p> <p>3 So lots of -- lots of</p> <p>4 different reasons that that tight</p> <p>5 integration between DFP and AdX</p> <p>6 made it very difficult for others</p> <p>7 to actually win or compete in</p> <p>8 those decisions.</p> <p>9 BY MS. WOOD:</p> <p>10 Q. And how, if at all, did</p> <p>11 AdX's role in the market impact</p> <p>12 publishers' willingness to walk away from</p> <p>13 DFP?</p> <p>14 MR. JUSTUS: Objection.</p> <p>15 Form.</p> <p>16 THE WITNESS: Well, I mean,</p> <p>17 the way that publishers thought</p> <p>18 about DFP, in the beginning, was</p> <p>19 as, you know, one of multiple ad</p> <p>20 servers that competed on features.</p> <p>21 So if you liked the features</p> <p>22 of DFP, you'd use it. If not,</p> <p>23 you'd switch to a different ad</p> <p>24 server.</p>	<p style="text-align: right;">Page 117</p> <p>1 Within a few years of AdX,</p> <p>2 it was pretty clear that, you</p> <p>3 know, it was DFP and AdX together.</p> <p>4 And publishers would see that AdX</p> <p>5 was producing 60 percent of their</p> <p>6 programmatic revenue.</p> <p>7 And their perspective was</p> <p>8 that switching ad servers would</p> <p>9 put that 60 percent of revenue at</p> <p>10 risk. And as programmatic became</p> <p>11 an increasing share of publisher</p> <p>12 revenue, the financial risk of</p> <p>13 losing AdX, which was only</p> <p>14 available through DFP, was -- was</p> <p>15 very scary to publishers thinking</p> <p>16 about leaving the -- switching ad</p> <p>17 servers.</p> <p>18 BY MS. WOOD:</p> <p>19 Q. And what is your basis for</p> <p>20 saying that?</p> <p>21 A. Because AppNexus built a</p> <p>22 competitive ad server, we would go into</p> <p>23 pitches with publishers, and the</p> <p>24 publisher would say that. They would</p>

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1 ad.
 2 BY MS. WOOD:
 3 Q. You said these independent
 4 SSPs, they weren't allowed to
 5 participate. They were excluded from the
 6 process.
 7 Who excluded them?
 8 MR. JUSTUS: Objection.
 9 Form.
 10 THE WITNESS: I mean, the
 11 Google ad stack, like, thinking of
 12 DFP and AdX together, did not have
 13 a capability for other ad
 14 exchanges to participate in
 15 dynamic allocation, to insert
 16 demand into the decisioning
 17 process. It was -- it was not an
 18 open platform for other exchanges.
 19 BY MS. WOOD:
 20 Q. You say that DFP didn't have
 21 that capability. DFP could have built
 22 that capability to allow that
 23 participation; is that right?
 24 MR. JUSTUS: Objection.

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1 THE WITNESS: If everyone
 2 had to submit a sealed bid in an
 3 auction, you don't know what
 4 anyone else is going to bid. And
 5 so you have an incentive to
 6 probably put your best bid forward
 7 to make sure you don't lose.
 8 But if you could see
 9 everyone else's bid before you
 10 placed yours, you could bid just a
 11 tiny bit more than the next
 12 highest bidder or walk away.
 13 So that's an incredibly
 14 powerful bit of information to
 15 have in any auction. We're
 16 talking about it in the
 17 programatic market.
 18 What would happen is that
 19 Google -- I'm talking about Google
 20 as the company that controls DFP
 21 and owned AdX -- set it up so
 22 that, basically, AdX could see
 23 everybody else's bids, all the
 24 demand from the ad server, all the

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1 Form.
 2 THE WITNESS: Absolutely.
 3 And they did, eventually, build a
 4 version of that later on.
 5 BY MS. WOOD:
 6 Q. Have you ever heard the term
 7 "last look" in connection with header
 8 bidding?
 9 A. Last look is not just
 10 relevant to header bidding. So the idea
 11 of last look is that -- and this applies
 12 to any auction process. I mean, you can
 13 go to Sotheby's or whatever. Wouldn't it
 14 be great if everybody else had to place a
 15 bid, you see what those bids are, and
 16 then you decide if you want to
 17 participate or not.
 18 So you have full information
 19 at the end of the process. And so you
 20 can just bid one penny higher than the
 21 next bidder.
 22 Q. And why would that be great?
 23 MR. JUSTUS: Objection to
 24 form.

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1 demand from all of their
 2 participants -- all of the bidders
 3 into the auction and then decide
 4 if AdSense would want to bid a
 5 little bit higher or not.
 6 So they are basically
 7 building this system so that they
 8 could have more information than
 9 anybody else and, basically, get
 10 better pricing, get better
 11 outcomes than anyone else.
 12 BY MS. WOOD:
 13 Q. And how, if at all, did that
 14 impact Google's market share?
 15 A. I don't know exactly how it
 16 impacted market share because I don't
 17 have all the numbers.
 18 But in terms of their
 19 ability to out-price competitors, it had
 20 a huge impact. It meant that they could
 21 play games with price if they wanted to,
 22 You know, or they could have a preferred
 23 price, even though it's supposedly an
 24 auction. They would always win at a

<p style="text-align: right;">Page 126</p> <p>1 better price than anyone else.</p> <p>2 And that translated to both</p> <p>3 their market story -- they would tell</p> <p>4 that story to agencies and advertisers</p> <p>5 and say, well, you know, we can --</p> <p>6 because we have last look, we will always</p> <p>7 have a better price than anybody else.</p> <p>8 It was very powerful for win</p> <p>9 rates because they never accidentally</p> <p>10 underpriced by a penny or two. They even</p> <p>11 built a feature that let them bump prices</p> <p>12 by a couple pennies to win auctions, and</p> <p>13 then they'd sort of make it up on the</p> <p>14 next auction.</p> <p>15 They had all these</p> <p>16 techniques because they had full</p> <p>17 information, to let them effectively</p> <p>18 manipulate auctions and manipulate the</p> <p>19 decisioning process, in their benefit.</p> <p>20 Q. How, if at all, did header</p> <p>21 bidding impact advertisers?</p> <p>22 MR. JUSTUS: Objection.</p> <p>23 Form.</p> <p>24 THE WITNESS: I think the</p>	<p style="text-align: right;">Page 127</p> <p>1 easiest way to think about this,</p> <p>2 for an advertiser, is, if Google</p> <p>3 operated the highest-priced ad</p> <p>4 exchange, and I'm a buyer, I'm an</p> <p>5 advertiser, I would probably</p> <p>6 rather use a less expensive</p> <p>7 intermediary.</p> <p>8 If this were a competitive</p> <p>9 market, and there were five major</p> <p>10 exchanges, and one charged twice</p> <p>11 as much as the others, as a buyer,</p> <p>12 I'd rather have the lower-priced</p> <p>13 exchanges and have less of my</p> <p>14 money going to an intermediary and</p> <p>15 more of my money going to buy</p> <p>16 inventory.</p> <p>17 By biasing this decisioning</p> <p>18 process toward AdX, they were</p> <p>19 basically costing advertisers more</p> <p>20 money for buying the exact same ad</p> <p>21 impression that they could have</p> <p>22 bought through others.</p> <p>23 So header bidding gave</p> <p>24 advertisers an option to buy</p>
<p style="text-align: right;">Page 128</p> <p>1 through the ad exchange or SSP of</p> <p>2 their choice, and, you know,</p> <p>3 presumably, to save money and to</p> <p>4 get better outcomes, to drive more</p> <p>5 sales, and, you know, brand lift,</p> <p>6 and all the other things marketers</p> <p>7 care about, for the same</p> <p>8 investment of dollars.</p> <p>9 BY MS. WOOD:</p> <p>10 Q. And how did header bidding</p> <p>11 impact AppNexus's revenue?</p> <p>12 MR. JUSTUS: Objection.</p> <p>13 Form.</p> <p>14 THE WITNESS: Well, for</p> <p>15 AppNexus, our biggest concern was</p> <p>16 that we wanted to have fair access</p> <p>17 to every ad impression. And we</p> <p>18 felt like we had to invent header</p> <p>19 bidding. I mean, the very</p> <p>20 beginning of our company was we</p> <p>21 invented header bidding. It was</p> <p>22 the first product we built because</p> <p>23 we knew we had to have a way to</p> <p>24 bid into every single ad</p>	<p style="text-align: right;">Page 129</p> <p>1 impression.</p> <p>2 Now, we only had three</p> <p>3 publishers live, you know, in</p> <p>4 2008. But the idea of it was just</p> <p>5 imperative if you wanted to build</p> <p>6 an open, federated bidding</p> <p>7 process. And so over the years it</p> <p>8 was the only way to have a fair</p> <p>9 playing field against Google.</p> <p>10 So, arguably, our entire</p> <p>11 business depended on having fair,</p> <p>12 open access to publisher ad</p> <p>13 inventory.</p> <p>14 BY MS. WOOD:</p> <p>15 Q. What was Prebid?</p> <p>16 A. So when we invented header</p> <p>17 bidding, it was a AppNexus product, like,</p> <p>18 it was something we sold people and we</p> <p>19 charged money for.</p> <p>20 As header bidding started to</p> <p>21 get traction as an idea, other ad tech</p> <p>22 companies built their own header building</p> <p>23 products. And so there began to be a</p> <p>24 competition with publishers of, you know,</p>

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1 **THE WITNESS: I started with**
2 **about 80 percent when we founded**
3 **the firm. And by the end I think**
4 **I had about 10 percent ownership.**
5 BY MR. JUSTUS:
6 Q. So as an owner of AppNexus,
7 did you benefit from AppNexus's business
8 relationship with Microsoft?
9 MS. WOOD: Objection to the
10 form.
11 **THE WITNESS: Can you**
12 **explain what you mean.**
13 BY MR. JUSTUS:
14 Q. Yeah.
15 So Microsoft paid AppNexus
16 at least \$50 million. Was that good for
17 the value of your shares in AppNexus?
18 MS. WOOD: Objection to the
19 form.
20 MR. WEISS: Objection.
21 **THE WITNESS: Yeah, I mean,**
22 **having Microsoft as a client was**
23 **good for AppNexus as a company.**
24 BY MR. JUSTUS:

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1 form.
2 **THE WITNESS: I know what we**
3 **referred to at AppNexus when we**
4 **talked about that. We talked**
5 **about that being a -- you know, an**
6 **ad server, an ad exchange, and a**
7 **DSP.**
8 BY MR. JUSTUS:
9 Q. Is one of the -- so applying
10 that definition of what it means to have
11 an end-to-end ad tech stack, did AT&T
12 acquire AppNexus because AppNexus had an
13 end-to-end ad tech stack?
14 MS. WOOD: Objection to the
15 form. Foundation.
16 **THE WITNESS: Yeah, I can't**
17 **really speculate as to why they**
18 **acquired us.**
19 BY MR. JUSTUS:
20 Q. Was Microsoft still a
21 customer of AppNexus after it was
22 acquired by AT&T?
23 **A. As of the time I left, yes.**
24 Q. Was AppNexus rebranded at

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1 Q. And good for you as an
2 owner?
3 MS. WOOD: Objection to
4 form.
5 **THE WITNESS: Yeah.**
6 BY MR. JUSTUS:
7 Q. So what role did you have
8 after AppNexus was acquired by AT&T in
9 2018?
10 **A. After we got acquired, I**
11 **spent six weeks doing transition work to**
12 **help the new leadership team of -- who**
13 **AT&T assigned, and then we sold the**
14 **company, I think, August 15th or**
15 **something. And I think by the end of**
16 **September, I was transitioned into kind**
17 **of a, you know, advisory role, where I**
18 **wasn't particularly involved in running**
19 **the business, until I transitioned fully**
20 **out in February of 2019.**
21 Q. Do you know what it means
22 for an ad tech company to have an
23 end-to-end ad tech stack?
24 MS. WOOD: Objection to the

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1 AT&T?
2 **A. AppNexus was merged with**
3 **another division of AT&T. They'd**
4 **acquired DirectTV, and they took the**
5 **DirectTV advertising business and merged**
6 **it with AppNexus, and they called the**
7 **combined entity Xandr.**
8 Q. Was AppNexus, then Xandr,
9 later acquired by Microsoft?
10 **A. Yes.**
11 Q. Do you recall when that was,
12 if you ever knew?
13 **A. I believe it closed in**
14 **December of 2021.**
15 Q. So given Microsoft's
16 acquisition of AppNexus's end-to-end ad
17 tech stack, Microsoft now competes with
18 Google in providing advertising
19 technology to buyers and sellers of
20 digital ads, correct?
21 MR. WEISS: Objection.
22 Foundation --
23 MS. WOOD: Objection to
24 form.

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1 MR. WEISS: -- and form.
2 BY MR. JUSTUS:
3 Q. Despite all that, you can
4 still answer.
5 A. Wow. I -- I understand what
6 you're saying. I don't -- I can't speak
7 to how Microsoft is using those assets.
8 Q. So Microsoft acquired
9 AppNexus's end-to-end ad tech stack,
10 correct?
11 MR. WEISS: Objection.
12 Foundation.
13 THE WITNESS: Whatever is
14 left of it post acquisition.
15 I haven't been involved in
16 that business for five years, so I
17 don't know what they acquired and
18 what they didn't, aside from what
19 was publicly disclosed.
20 BY MR. JUSTUS:
21 Q. To the best of your
22 knowledge, did Microsoft acquire
23 AppNexus's end-to-end ad tech stack
24 technology?

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1 Q. I promise we will not do
2 70 documents today.
3 A. It's okay if you do. I got
4 nowhere to go.
5 Q. As your attorney glares at
6 me.
7 A. He has somewhere to go.
8 Brooklyn is a lake.
9 MR. WEISS: Autumn is lovely
10 this time of year. Come on up.
11 Bring the kids.
12 BY MR. JUSTUS:
13 Q. All right. Mr. O'Kelley,
14 I'm showing you what we've marked as
15 O'Kelley Exhibit 2. It has Bates number
16 DOJ-ADS-77953.
17 What is this document?
18 A. This looks like an e-mail
19 where I am responding to someone from the
20 DOJ named Mike Bonanno, who says that he
21 wants to arrange a conference call with
22 some AppNexus people to talk about our
23 products, the display advertising space
24 in the Google/AdMeld transaction.

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1 MS. WOOD: Same objection.
2 MR. WEISS: Objection.
3 Asked and answered.
4 THE WITNESS: To the best of
5 my knowledge, I believe they did.
6 BY MR. JUSTUS:
7 Q. And when AppNexus operated
8 that end-to-end ad tech stack technology,
9 AppNexus competed with Google, correct?
10 MS. WOOD: Objection to the
11 form. Foundation.
12 MR. WEISS: Objection.
13 THE WITNESS: Yes.
14 BY MR. JUSTUS:
15 Q. Mr. O'Kelley, did you speak
16 with the DOJ in 2011 when Google was in
17 the process of acquiring AdMeld?
18 A. I don't remember if I did.
19 MR. JUSTUS: Can we have
20 Tab 70.
21 (Document marked for
22 identification as O'Kelley
23 Exhibit 2.)
24 BY MR. JUSTUS:

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1 Q. So, Mr. O'Kelley, do you
2 now -- well, let me ask you a different
3 question. Sorry.
4 Do you have any reason to
5 doubt that this Exhibit 2 is a true and
6 accurate copy of an e-mail exchange
7 between you and Mike Bonanno of the DOJ?
8 A. No.
9 Q. So does this remind you,
10 Mr. O'Kelley, that you did speak with the
11 DOJ concerning Google's AdMeld
12 acquisition?
13 MS. WOOD: Objection to the
14 form. Foundation.
15 THE WITNESS: It looks, from
16 this e-mail, like I asked Michael
17 Rubenstein, our president, to talk
18 to the DOJ.
19 BY MR. JUSTUS:
20 Q. Do you know if you joined
21 that call?
22 A. I don't.
23 Q. So someone from AppNexus
24 talked to the DOJ concerning the AdMeld

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1 more?

2 MR. JUSTUS: Another hour.

3 MS. WOOD: If you want to

4 talk for an hour about AdX's take

5 rates, sure.

6 MR. JUSTUS: We don't have

7 any more questions.

8 THE VIDEOGRAPHER: 3:52. We

9 are off the record.

10 *****

11 (Excused.)

12 (Deposition concluded at

13 approximately 3:52 p.m.)

14

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1 INSTRUCTIONS TO WITNESS

2

3 Please read your deposition

4 over carefully and make any necessary

5 corrections. You should state the reason

6 in the appropriate space on the errata

7 sheet for any corrections that are made.

8 After doing so, please sign

9 the errata sheet and date it.

10 You are signing same subject

11 to the changes you have noted on the

12 errata sheet, which will be attached to

13 your deposition.

14 It is imperative that you

15 return the original errata sheet to the

16 deposing attorney within thirty (30) days

17 of receipt of the deposition transcript

18 by you. If you fail to do so, the

19 deposition transcript may be deemed to be

20 accurate and may be used in court.

21

22

23

24

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1

2 CERTIFICATE

3

4

5 I HEREBY CERTIFY that the

6 witness was duly sworn by me and that the

7 deposition is a true record of the

8 testimony given by the witness.

9

10 It was requested before

11 completion of the deposition that the

12 witness, BRIAN O'KELLEY, have the

13 opportunity to read and sign the

14 deposition transcript.

15

16

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24

Michelle L. Gray

MICHELLE L. GRAY,
A Registered Professional
Reporter, Certified Shorthand
Reporter, Certified Realtime
Reporter and Notary Public
Dated: October 3, 2023

(The foregoing certification
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supervision of the certifying reporter.)

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2 E R R A T A

3 - - - - -

4 PAGE LINE CHANGE

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6 REASON: _____

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8 REASON: _____

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10 REASON: _____

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